

WHAT IS CLAIMED IS:

1. An image reading apparatus, comprising:

a reader configured to read one side of an original document being conveyed at a reading position;

a contact glass comprising a surface configured to contact the original document;

a reference disposed at a side of the contact glass opposite to the surface and configured to be movable between the reading position and a standby position, the reference comprising a surface configured to face the reader, the surface having a predetermined color to provide shading data used for a shading correction; and

a carrier configured to move the reference to the reading position,

wherein the reader is configured to obtain the shading data by reading the predetermined color on the surface of the reference at the reading position.

2. The image reading apparatus according to claim 1, wherein the reader is configured to read the predetermined color on the surface of the reference at a plurality of locations to obtain data.

3. The image reading apparatus according to claim 2, further comprising:

a calculator configured to average the data to obtain the shading data.

4. The image reading apparatus according to claim 2, wherein the reader is configured to sequentially read the predetermined color on the surface of the reference at a plurality of locations according to a motion of the reference.

5. The image reading apparatus according to claim 1, further comprising:

guiding members configured to guide the reference moving between the standby position and the reading position above the standby position, wherein

the reader is configured to read the predetermined color on the surface of the reference at a plurality of locations as the reference slides down towards the standby position from the reading position when the carrier is deactivated.

6. The image reading apparatus according to claim 1, wherein the reference comprises a reference sheet having the surface and a transparent member covering the surface of the reference sheet configured to face the reader.

7. The image reading apparatus according to claim 6, further comprising:
a cleaner configured to contact the transparent member and to perform cleaning on a surface of the transparent member facing the reader according to a movement of the reference between the reading position and standby position.

8. An image reading apparatus, comprising:
reading means for reading one side of an original document being conveyed at a reading position;
contacting means for contacting the original document;
reference providing means for providing a predetermined color surface between the reading means and the contacting means, the reference providing means configured to be movable between the reading position and a standby position, the reference providing means comprising a surface configured to face the reading means, the surface having a predetermined color to provide shading data used for a shading correction; and
carrying means for moving the reference providing means to the reading position,
wherein the reading means is configured to obtain the shading data by reading the predetermined color surface of the reference providing means at the reading position.

9. The image reading apparatus according to claim 8, wherein the reading means is configured to read the predetermined color surface of the reference providing means at a plurality of locations on the surface to obtain data.

10. The image reading apparatus according to claim 10, further comprising:
calculating means for averaging the data to obtain the shading data.

11. The image reading apparatus according to claim 10, wherein the reading means is configured to sequentially read the predetermined color surface of the reference providing means at a plurality of locations on the surface according to a motion of the reference providing means.

12. The image reading apparatus according to claim 8, further comprising:
guiding means for guiding the reference providing means moving between the standby position and the reading position above the standby position, wherein the reading means is configured to read the predetermined color surface of the reference providing means at a plurality of locations on the surface as the reference providing means slides down towards the standby position from the reading position when the carrying means is deactivated.

13. The image reading apparatus according to claim 8, wherein the reference providing means comprises a sheet having the predetermined color surface, and protecting means for covering the sheet.

14. The image reading apparatus according to claim 13, further comprising:
cleaning means for cleaning a surface of the protecting means facing the reading means according to a movement of the reference providing means between the reading position and standby position.

15. An image reading method, comprising:
providing a reader configured to read one side of an original document being conveyed at a reading position;
providing a contact glass comprising a surface configured to contact the original document at the reading position;

disposing a reference at a side of the contact glass opposite to the surface, the reference being configured to be movable between the reading position and a standby position, the reference comprising a surface facing the reader, the surface having a predetermined color configured to provide shading data used for a shading correction; moving the reference to the reading position; reading the predetermined color on the surface of the reference at the reading position with a reader to obtain read data; and obtaining the shading data from the read data.

16. The method according to claim 15, wherein the predetermined color on the surface of the reference is read at a plurality of locations on the surface to obtain the read data.

17. The method according to claim 16, further comprising:

averaging the read data to obtain the shading data.

18. The method according to claim 16, wherein the predetermined color on the surface of the reference is read at a plurality of locations on the surface according to a motion of the reference.

19. The method according to claim 15, further comprising:

providing guiding members configured to guide the reference moving between the standby position and the reading position above the standby position; permitting the reference to slide down to the standby position from the reading position; and

reading the predetermined color on the surface of the reference at a plurality of locations on the surface with the reader as the reference slides to the standby position.

20. The method according to claim 15, wherein the reference comprises a sheet and a transparent member covering the sheet.

21. The method according to claim 20, further comprising:
cleaning off a surface of the transparent member facing the reader according to a
movement of the reference between the reading position and standby position.